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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: **USE OF CC-CHEMOKINE MUTANTS AGAINST LIVER DISEASES**

(57) Abstract: CC-chemokine mutants having reduced Glycosaminoglycans (GAG)-binding properties are effective against liver fibrotic inflammatory and/or autoimmune diseases. Particularly preferred are the mutants of CCL5/RANTES having reduced GAG-binding properties.

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/51090

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61K38/19 A61P1/16

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE WPI Section Ch, Week 200242 Derwent Publications Ltd., London, GB; Class B04, AN 2002-394437 XP002238282 & WO 02/30464 A (DAIICHI PHARM CO LTD) 18 April 2002 (2002-04-18) abstract	1-10
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

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- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
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- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>WO 02/28419 A (KOSCO VILBOIS MARIE ;WELLS TIMOTHY N C (FR); PROUDFOOT AMANDA (FR))  11 April 2002 (2002-04-11)  * cited in the application *  claims 1-14  page 4, line 14 - line 30  example 1</p>	1-10
Y	<p>LAURENCE JENNIFER S ET AL: "Importance of basic residues and quaternary structure in the function of MIP-1beta: CCR5 binding and cell surface sugar interactions"  BIOCHEMISTRY, AMERICAN CHEMICAL SOCIETY, EASTON, PA, US,  vol. 40, no. 16,  24 April 2001 (2001-04-24), pages  4990-4999, XP002193384  ISSN: 0006-2960  * cited in the application *  abstract  *discussion*</p>	1-10
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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/51090

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	MIYAGUCHI S ET AL: "Elevated plasma RANTES in primary biliary cirrhosis patients" HEPATOLOGY RESEARCH 1997 IRELAND, vol. 8, no. 3, 1997, pages 156-163, XP009009465 ISSN: 0928-4346 the whole document	1-10
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Y	US 5 739 103 A (ZHANG YUJUN ET AL) 14 April 1998 (1998-04-14) claims 1-21 column 6, line 41 - column 7, line 2	1-10
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Y	WO 96/38559 A (DANA FARBER CANCER INST INC) 5 December 1996 (1996-12-05) claims 1-12 page 3, lines 5-13	1-10
A	AJUEBOR MAUREEN ET AL: "Novel protective effects of the CC chemokine CCL2/MCP-1 in concanavalin A-induced acute hepatitis" GASTROENTEROLOGY, vol. 122, no. 4 Suppl. 1, April 2002 (2002-04), page A.637, XP009033937 & DIGESTIVE DISEASE WEEK AND THE 103RD ANNUAL MEETING OF THE AMERICAN GASTROENTEROLOGICAL ASSOCIATION; SAN FRANCISCO, CA, USA; MAY 19-22, 2002 ISSN: 0016-5085 abstract	1-10

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/51090

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	AJUEBOR MAUREEN ET AL: "The coordinated action of CC chemokines and their receptor may orchestrate hepatic inflammation during chronic experimental cholangitis." GASTROENTEROLOGY, vol. 123, no. 1 Supplement, July 2002 (2002-07), page 57, XP001194576 & DIGESTIVE DISEASE WEEK AND THE 103RD ANNUAL MEETING OF THE AMERICAN GASTROENTEROLOGICAL ASSOCIATION; SAN FRANCISCO, CA, USA; MAY 19-22, 2002 ISSN: 0016-5085 abstract	1-10
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 03/51090

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claim 10 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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International Application No

PCT/EP 03/51090

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